

**COMBINATORIAL SYNTHESIS AND ANALYSIS OF METAL-
LIGAND COMPOSITIONS USING SOLUBLE METAL PRECURSORS**

ABSTRACT OF THE INVENTION

5 The present invention relates to a process of
conducting research using combinatorial techniques wherein
metal-ligand compositions are synthesized and screened for
reactivity in reactions of interest, particularly metal-
ligand compounds which are suitable for use as catalysts.
In the process, an array of different metal-ligand
10 compositions is prepared by delivering a dissolved, soluble
metal precursor and a metal-binding ligand to each reaction
vessel or well in the array, where they may optionally be
combined with an activator and/or other additives. The
resulting metal-ligand composition in each vessel is then
15 screened for reactivity in a chemical reaction of interest,
particularly for catalytic activity in a polymerization
reaction.